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Docket No.: SMQ-122RCE/P6281

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for a computer to determine whether a patch should be installed on the computer, said method performed by the computer comprising:

writing data to a computer object on the computer, the data includes at least one realization defining a state of the computer;

using a mapping to find the patch associated with the at least one realization, the patch includes one or more patch expressions, each of the patch expressions includes at least one patch attribute statement, the at least one patch attribute statement comprising at least one script command that when executed processes configuration information in the computer object;

generating a script program including the at least one patch attribute statement, wherein each patch attribute statement is called with at least one conditional statement that returns a list of one or more patches if the at least one conditional statement evaluates as true based on a presence of a software or hardware component indicated in a~~the~~ computer object for the computer on which the patch will be applied, and wherein an attribute defined for the attribute statement is associated with the installation of the patch to the computer if the computer includes the returned list of patches; and

associating the script program with the patch, wherein the script program executes and processes the computer object including information on installed software and hardware components to determine whether to install the patch on the computer based on attributes of the installation determined by the script program.

2. (Original) The method of claim 1, wherein the patch attribute statement is capable of comprising a patch requires statement, wherein the patch requires attribute indicates that the patches in the returned patch list must be installed in the computer in order for the patch to be installed in the computer.

3. (Original) The method of claim 1, wherein the conditional and patch attribute statements utilize a syntax that is similar to a syntax of commands capable of being interpreted by a command processor interface of the computer operating system, and wherein the syntax of the conditional and patch attribute statements prevent the conditional and patch attribute

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statements from executing on the computer outside of a patch update interpreter that is capable of interpreting the syntax of the conditional and patch attribute statements.

4. (Original) The method of claim 1, wherein the patch attribute statements included in the script program are capable of including patch attribute statements that are members of the set of patch attribute statements comprising:

a patch incompatible statement, wherein the patch incompatible attribute indicates that if the patches in the returned patch list are installed in the computer, then the patch cannot be installed in the computer; and

a patch prefers statement, wherein the patch prefers attribute indicates that the patches in the returned patch list are recommended to be installed in the computer.

5. (Original) The method of claim 1, wherein the patch attribute statements are further capable of including a patch constraint attribute called with at least one conditional statement, wherein the patch constraint attribute indicates that the patch can be installed in the computer if each conditional statement evaluates as true.

6. (Original) The method of claim 1, wherein the conditional statements provided with the attribute statements are members of the set of conditional statements comprising:

a first conditional statement that determines whether the computer object indicates that a specified vendor operating system is installed on the computer;

a second conditional statement that determines whether the computer object indicates that a specified version of the operating system is installed on the computer;

a third conditional statement that determines whether the computer object indicates that the computer includes a specified hardware platform;

a fourth conditional statement that determines whether the computer object indicates that a specified software package having a specified version number is installed on the computer;

a fifth conditional statement that determines whether the computer object indicates that a specified software package having a specified version number or higher is installed on the computer;

a sixth conditional statement that determines whether the computer object indicates that a specified patch having a specified version number is installed on the computer;

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a seventh conditional statement that determines whether the computer object indicates that a specified patch package having a specified version number or higher is installed on the computer; and

an eighth conditional statement that determines whether the computer object indicates that the computer includes a specified architecture.

7. (Original) The method of claim 1, wherein the computer object is further capable of indicating a realization that defines a state of the computer, wherein the conditional statements are further capable of determining whether realizations are included in the computer object indicating the presence of the defined realization states at the computer, wherein the attribute defined for the patch attribute statement is associated with the installation of the patch to the computer if the at least one conditional statement is evaluated as true.

8. (Original) The method of claim 1, wherein the patch attribute statement includes multiple conditional statements and a different list of patches for each conditional statement, wherein the attribute defined for the attribute statement is associated with the installation of the patch to the system if the system includes the returned list of patches for the conditional statement that evaluated as true.

9. (Currently Amended) A system for a computer to determine whether to apply a patch including content onto the computer, comprising:

a processor;

a computer readable medium including a computer object including information on installed software and hardware components determined in the computer; the computer object is written with data including at least one realization defining a state of the computer

an interpreter program for determining whether to install the patch and interpreting:

(i) a map for finding the patch associated with the at least one realization, the patch includes one or more patch expressions, each of the patch expressions includes at least one patch attribute statement, the at least one patch attribute statement comprising at least one script command that when executed processes configuration information in the computer object;

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(i)(ii) a set of conditional statements that return a boolean response based on a presence of a software or hardware component indicated in the computer object for the computer on which the patch will be applied;

(ii)(iii) ~~a the at least one patch~~ attribute statement called with at least one conditional statement that returns a list of one or more patches if the at least one conditional statement evaluates as true, wherein an attribute defined for the attribute statement is associated with the installation of the patch to the computer if the computer includes the returned list of patches; and

(iii)(iv) a script program including at least one patch attribute statement, wherein the script program statements and computer object are processed to determine whether the at least one conditional statement associated with each patch attribute statement is true and, if so, whether the patches in the returned list are included in the computer.

10. (Original) The system of claim 9, wherein the interpreter program is further capable of interpreting a patch requires statement, wherein the patch requires attribute indicates that the patches in the returned patch list must be installed in the computer in order for the patch to be installed in the computer.

11. (Original) The system of claim 9, wherein the conditional and patch attribute statements are implemented in a syntax that is similar to a syntax of commands capable of being interpreted by a command processor interface of the computer operating system, and wherein the syntax of the conditional and patch attribute statements capable of being interpreted by the program interpreter are not capable of being interpreted by the command processor interface.

12. (Original) The system of claim 9, wherein the interpreter program is further capable of interpreting patch attribute statements that are members of the set of patch attribute statements comprising:

a patch incompatible statement, wherein the patch incompatible attribute indicates that if the patches in the returned patch list are installed in the computer, then the patch cannot be installed in the computer; and

a patch prefers statement, wherein the patch prefers attribute indicates that the patches in the returned patch list are recommended to be installed in the computer.

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13. (Original) The system of claim 9, wherein the interpreter program is further capable of interpreting a patch constraint attribute called with at least one conditional statement, wherein the patch constraint attribute indicates that the patch can be installed in the computer if each conditional statement evaluates as true.

14. (Original) The system of claim 9, wherein the conditional statements provided with the attribute statements are members of the set of conditional statements comprising:

a first conditional statement that determines whether the computer object indicates that a specified vendor operating system is installed on the computer;

a second conditional statement that determines whether the computer object indicates that a specified version of the operating system is installed on the computer;

a third conditional statement that determines whether the computer object indicates that the computer includes a specified hardware platform;

a fourth conditional statement that determines whether the computer object indicates that a specified software package having a specified version number is installed on the computer;

a fifth conditional statement that determines whether the computer object indicates that a specified software package having a specified version number or higher is installed on the computer;

a sixth conditional statement that determines whether the computer object indicates that a specified patch having a specified version number is installed on the computer;

a seventh conditional statement that determines whether the computer object indicates that a specified patch package having a specified version number or higher is installed on the computer; and

an eighth conditional statement that determines whether the computer object indicates that the computer includes a specified architecture.

15. (Original) The system of claim 9, wherein the computer object is further capable of indicating a realization that defines a state of the computer, wherein the conditional statements are further capable of determining whether realizations are included in the computer object indicating the presence of the defined realization states at the computer, wherein the attribute

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defined for the patch attribute statement is associated with the installation of the patch to the computer if the at least one conditional statement is evaluated as true.

16. (Original) The system of claim 9, wherein the patch attribute statement includes multiple conditional statements and a different list of patches for each conditional statement, wherein the attribute defined for the attribute statement is associated with the installation of the patch to the system if the system includes the returned list of patches for the conditional statement that evaluated as true.

17. (Currently Amended) An article of manufacture including program code for a computer to determine whether to apply a patch including content to the computer by:

providing a computer object including information on software and hardware components in the computer;

writing data to the computer object, the data includes at least one realization defining a state of the computer;

using a mapping to find the patch associated with the at least one realization, the patch includes one or more patch expressions, each of the patch expressions includes at least one patch attribute statement, the at least one patch attribute statement comprising at least one script command that when executed processes configuration information in the computer object;

interpreting a script program including the at least one patch attribute statement, wherein each patch attribute statement is called with at least one conditional statement that returns a list of one or more patches if the at least one conditional statement evaluates as true based on a presence of a software or hardware component indicated in the computer object for the computer on which the patch will be applied, and wherein an attribute defined for the attribute statement is associated with the installation of the patch to the computer if the computer includes the returned list of patches; and

processing the computer object including information on installed software and hardware components when executing the script program to determine whether to install the patch on the computer based on attributes of the installation determined by the script program.

18. (Original) The article of manufacture of claim 17, wherein the patch attribute statement is capable of comprising a patch requires statement, wherein the patch requires

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attribute indicates that the patches in the returned patch list must be installed in the computer in order for the patch to be installed in the computer.

19. (Original) The article of manufacture of claim 17, wherein the conditional and patch attribute statements utilize a syntax that is similar to a syntax of commands capable of being interpreted by a command processor interface of the computer operating system, and wherein the syntax of the conditional and patch attribute statements prevent the conditional and patch attribute statements from executing on the computer outside of a patch update interpreter that is capable of interpreting the syntax of the conditional and patch attribute statements.

20. (Original) The article of manufacture of claim 17, wherein the patch attribute statements included in the script program are capable of including patch attribute statements that are members of the set of patch attribute statements comprising:

a patch incompatible statement, wherein the patch incompatible attribute indicates that if the patches in the returned patch list are installed in the computer, then the patch cannot be installed in the computer; and

a patch prefers statement, wherein the patch prefers attribute indicates that the patches in the returned patch list are recommended to be installed in the computer.

21. (Original) The article of manufacture of claim 17, wherein the patch attribute statements are further capable of including a patch constraint attribute called with at least one conditional statement, wherein the patch constraint attribute indicates that the patch can be installed in the computer if each conditional statement evaluates as true.

22. (Original) The article of manufacture of claim 17, wherein the conditional statements provided with the attribute statements are members of the set of conditional statements comprising:

a first conditional statement that determines whether the computer object indicates that a specified vendor operating system is installed on the computer;

a second conditional statement that determines whether the computer object indicates that a specified version of the operating system is installed on the computer;

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a third conditional statement that determines whether the computer object indicates that the computer includes a specified hardware platform;

a fourth conditional statement that determines whether the computer object indicates that a specified software package having a specified version number is installed on the computer;

a fifth conditional statement that determines whether the computer object indicates that a specified software package having a specified version number or higher is installed on the computer;

a sixth conditional statement that determines whether the computer object indicates that a specified patch having a specified version number is installed on the computer;

a seventh conditional statement that determines whether the computer object indicates that a specified patch package having a specified version number or higher is installed on the computer; and

an eighth conditional statement that determines whether the computer object indicates that the computer includes a specified architecture.

23. (Original) The article of manufacture of claim 17, wherein the computer object is further capable of indicating a realization that defines a state of the computer, wherein the conditional statements are further capable of determining whether realizations are included in the computer object indicating the presence of the defined realization states at the computer, wherein the attribute defined for the patch attribute statement is associated with the installation of the patch to the computer if the at least one conditional statement is evaluated as true.

24. (Original) The article of manufacture of claim 17, wherein the patch attribute statement includes multiple conditional statements and a different list of patches for each conditional statement, wherein the attribute defined for the attribute statement is associated with the installation of the patch to the system if the system includes the returned list of patches for the conditional statement that evaluated as true.

25. (Currently Amended) A computer readable medium including data structures for a computer to determine whether to apply a patch including content to the computer, comprising:

a script program including at least one patch attribute statement obtained from the patch,
the at least one patch attribute statement comprising at least one script command that when

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executed processes configuration information in a computer object, the computer object is written with data comprising at least one realization defining a state of the computer, the script program uses a mapping to find the patch associated with the at least one realization, wherein each patch attribute statement is called with at least one conditional statement that returns a list of one or more patches if the at least one conditional statement evaluates as true based on a presence of a software or hardware components in the computer on which the patch will be applied, and wherein an attribute defined for the attribute statement is associated with the installation of the patch to the computer if the computer includes the returned list of patches, and wherein the script program and information on installed software and hardware components are processed to determine whether to install the patch on the computer based on attributes of the installation determined by the script program.

26. (Original) The computer readable medium of claim 25, wherein the patch attribute statement is capable of comprising a patch requires statement, wherein the patch requires attribute indicates that the patches in the returned patch list must be installed in the computer in order for the patch to be installed in the computer.

27. (Original) The computer readable medium of claim 25, wherein the conditional and patch attribute statements utilize a syntax that is similar to a syntax of commands capable of being interpreted by a command processor interface of the computer operating system, and wherein the syntax of the conditional and patch attribute statements prevent the conditional and patch attribute statements from executing on the computer outside of a patch update interpreter that is capable of interpreting the syntax of the conditional and patch attribute statements.

28. (Original) The computer readable medium of claim 25, wherein the patch attribute statements included in the script program are capable of including patch attribute statements that are members of the set of patch attribute statements comprising:

a patch incompatible statement, wherein the patch incompatible attribute indicates that if the patches in the returned patch list are installed in the computer, then the patch cannot be installed in the computer; and

a patch prefers statement, wherein the patch prefers attribute indicates that the patches in the returned patch list are recommended to be installed in the computer.

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29. (Original) The computer readable medium of claim 25, wherein the patch attribute statements are further capable of including a patch constraint attribute called with at least one conditional statement, wherein the patch constraint attribute indicates that the patch can be installed in the computer if each conditional statement evaluates as true.

30. (Original) The computer readable medium of claim 25, wherein the conditional statements provided with the attribute statements are members of the set of conditional statements comprising:

a first conditional statement that determines whether the computer object indicates that a specified vendor operating system is installed on the computer;

a second conditional statement that determines whether the computer object indicates that a specified version of the operating system is installed on the computer;

a third conditional statement that determines whether the computer object indicates that the computer includes a specified hardware platform;

a fourth conditional statement that determines whether the computer object indicates that a specified software package having a specified version number is installed on the computer;

a fifth conditional statement that determines whether the computer object indicates that a specified software package having a specified version number or higher is installed on the computer;

a sixth conditional statement that determines whether the computer object indicates that a specified patch having a specified version number is installed on the computer;

a seventh conditional statement that determines whether the computer object indicates that a specified patch package having a specified version number or higher is installed on the computer; and

an eighth conditional statement that determines whether the computer object indicates that the computer includes a specified architecture.

31. (Original) The computer readable medium of claim 25, wherein the computer object is further capable of indicating a realization that defines a state of the computer, wherein the conditional statements are further capable of determining whether realizations are included in the computer object indicating the presence of the defined realization states at the computer.

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wherein the attribute defined for the patch attribute statement is associated with the installation of the patch to the computer if the at least one conditional statement is evaluated as true.

32. (Original) The computer readable medium of claim 25, wherein the patch attribute statement includes multiple conditional statements and a different list of patches for each conditional statement, wherein the attribute defined for the attribute statement is associated with the installation of the patch to the system if the system includes the returned list of patches for the conditional statement that evaluated as true.